

NASA **MMIC** Reliability Assurance Program

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Abstract

Over the past few years considerable advancements have been made in the design and manufacture of Millimeter-Wave/Microwave Monolithic Integrated Circuits (MMIC). For space applications, MMICs present a promising and viable solution to the higher complexity and size restrictions of new missions. During the next decade MMICs will form the foundation for many mission-specific systems used throughout the NASA community and other federal agencies.

Prior to the insertion of MMIC technology into any space application an acceptable qualification procedure must be established. To address this need, NASA Headquarters, under Code OE, has initiated the MMIC Reliability Assurance Program to address the requirements and procedures for qualification, and screening of MMICs for space applications. The program is a collaborative effort between the Jet Propulsion Laboratory (JPL), NASA Centers, Rome Labs, and other users and manufacturers.

The objective of the MMIC Reliability Assurance Program is to develop a NASA MMIC qualification and screening guide based on inputs from manufacturers and users. A description and the status of the effort will be presented to solicit participation from users and manufacturers. Near future plans and schedule will also be addressed.